Claims

1. Device for converting energy comprising a gas generator (6) for generating a hydrogen-oxygen mixture or Brown gas with a reaction chamber (19), in which electrodes (29) are disposed, characterised in that the reaction chamber (19) is of a rotationally symmetrical shape with respect to an axis (18), and at least certain regions of the inner boundary surfaces (20) of the reaction chamber (19) in the region of a jacket (21) of the reaction chamber (19) are formed by inner electrode surfaces (30, 31) of the electrodes (29) of the gas generator (6).

2. Device as claimed in claim 1, characterised in that at least one inlet connector (25) for the working medium (24) is provided in the jacket (21), oriented at a tangent with respect to the jacket (21) of the reaction chamber (19).

3. Device as claimed in claim 1 or 2, characterised in that a rotor (32) with a rotation axis (33) is provided in the gas generator (6) and the rotation axis (33) is oriented coaxially with the Axis (18) of the reaction chamber (19).

4. Device as claimed in claim 3, characterised in that the rotor (32) is designed to generate a rotation with an angular velocity (34) in a range of from 10 s^{-1} to 25 s^{-1}.

5. Device as claimed in one of the preceding claims, characterised in that an outlet orifice (26) is provided in a base plate (22) and/or cover plate (23) closing off the reaction chamber (19) and the outlet orifice (26) is disposed coaxially with the axis (18) of the reaction chamber (19).

6. Device as claimed in claim 5, characterised in that the outlet orifice (26) is provided in the form of a suction lance (37) which is displaceable parallel with the direction of the axis (18) of the reaction chamber (19).

7. Device as claimed in claim 5 or 6, characterised in that the outlet orifice (26) is provided in the form of a suction funnel (43).

8. Device as claimed in claim 6 or 7, characterised in that a phase separation device (44) is provided in the suction lance (37).

9. Device as claimed in one of claims 5 to 8, characterised in that a throttle valve or a valve (45) is disposed in a line (7) connected to the outlet orifice (26) and the reaction chamber (19) is provided in the form of a pressure vessel.

10. Device as claimed in one of the preceding claims, characterised in that the gas generator (6) is provided with an acoustic source (38).

11. Device as claimed in claim 10, characterised in that the acoustic source (38) is designed to generate sound at a frequency in a range of from 25 kHz to 55 kHz, preferably from 38.5 kHz to 41.5 kHz, more preferably 40.5 kHz.

12. Device as claimed in claim 10 or 11, characterised in that the acoustic source (38) is oriented coaxially with the axis (18) of the reaction chamber (19).

13. Device as claimed in one of claims 10 to 12, characterised in that at least a part-region of the inner boundary surface (20) of the reaction chamber (19) is shaped as a reflector (39) for concentrating the sound.

14. Device as claimed in one of the preceding claims, characterised in that the gas generator (6) is provided with an IR source.

15. Device as claimed in one of the preceding claims, characterised in that the gas generator (6) is provided with a magnet (41).

16. Device as claimed in claim 15, characterised in that a magnetic field direction of the magnet in the region of the axis (18) of the reaction chamber (19) is oriented anti-parallel with respect to a direction of an angular velocity (34) of the rotor (32).

17. Device as claimed in one of the preceding claims, characterised in that a pressure vessel (4) is provided for the working medium (24).

18. Device as claimed in one of the preceding claims, characterised in that it is designed as a heating device (1) with a heat generator (2) and an interior of the heat generator (2) is provided with a sintered material (17).

19. Device as claimed in claim 18, characterised in that the gas generator (6), the heat generator (2), a heat exchanger (3), the pressure vessel (4) and a pump (5) are connected to one another to form a closed circuit for the working medium (24).

20. Device as claimed in claim 19, characterised in that a fan (14) is provided on the heat exchanger (3) for feeding heat away from the heat exchanger (3).

21. Device as claimed in one of the preceding claims, characterised in that a control system (13) is provided for controlling the operating mode.

22. Device as claimed in claim 21, characterised in that the control system (13) is designed to run an automatic control.

23. Method of converting energy using a hydrogen-oxygen mixture or Brown gas, characterised in that a working medium (24) or water is fed into a reaction chamber (19) of a rotationally symmetrical shape with respect to an axis (18), and an electric field (35) is applied between electrodes (29), and an electric field direction is oriented perpendicular to the axis (18) of the reaction chamber (19) and the water is displaced in rotation, and a rotation axis (33) of the water is oriented coaxially with the axis (18) of the reaction chamber (19)and the hydrogen-oxygen mixture or Brown gas formed in the region of the axis (18) of the reaction chamber (19) is fed out of the reaction chamber (19) and the hydrogen-oxygen mixture or Brown gas is recombined to form water.

24. Method as claimed in claim 23, characterised in that the water and/or Brown gas in the reaction chamber (19) is exposed to a magnetic field, and a magnetic induction (42) in the region of the axis (18) of the reaction chamber (19) is oriented anti-parallel with respect to the direction of the angular velocity (34).

25. Method as claimed in claim 23 or 24, characterised in that the water and/or Brown

gas is exposed to acoustic energy in the reaction chamber (19).

26. Method as claimed in one of claims 23 to 25, characterised in that the water and/or Brown gas is exposed to IR radiation in the reaction chamber (19).

27. Method as claimed in one of claims 23 to 26, characterised in that the water and Brown gas are conveyed in a closed circuit.

28. Method as claimed in one of claims 23 to 27, characterised in that an angular velocity (34) of the rotation of the water in the reaction chamber (19) is periodically varied.

29. Method as claimed in one of claims 23 to 28, characterised in that a pressure of the working medium (24) in the circuit is periodically varied.

30. Method as claimed in one of claims 23 to 29, characterised in that an acoustic intensity of an acoustic source (38) in the reaction chamber (19) is periodically varied.

31. Method as claimed in claim 30, characterised in that the periodic variation in the pressure of the working medium (24) takes place in an opposite phase from the periodic variation of the acoustic intensity of the acoustic source (38).

32. Method as claimed in one of claims 23 to 31, characterised in that the value of a frequency of the periodic variation in the pressure of the working medium (24) and/or the acoustic intensity of the acoustic source (38) and/or the angular velocity (34) is selected from a range of between 0.1 Hz and 10 Hz.

33. Method as claimed in one of claims 23 to 32, characterised in that the recombination of the hydrogen-oxygen mixture or Brown gas takes place in a heat generator (2) and the heat generated as a result is fed away with the water.

34. Method as claimed in claim 33, characterised in that the Brown gas is fed through a sintered material (17) in the heat generator (2).